What is claimed is:

1. An apparatus for evaluating an ultrasound scanner, comprising:
   a processor;
   a storage device;
   at least one output device;
   at least one input device; and
   software means operative on the processor for:
   (a) maintaining in the storage device information on the scanner;
   (b) maintaining in the storage device information regarding expected performance standards;
   (c) maintaining in the storage device information regarding at least one phantom test object;
   (d) inputting via said at least one input device;
   (e) interactively specifying said at least one phantom test object in image for processing;
   (f) processing said specified phantom test object in image to quantitatively determine the characteristics of said scanner;
   (g) maintaining in the storage device results of said processing; and
   (h) outputting via said at least one output device results of said processing.

2. The apparatus of claim 1, said software means further interactively allows for selection of a region in image with said phantom test object for analysis.

3. The apparatus of claim 1, said software means further interactively allows for setting object processing parameters and limits for analysis.

4. The apparatus of claim 1, wherein said output device is a printer.

5. The apparatus of claim 1, wherein said output device is a display screen.

6. A method of evaluating an ultrasound scanner, comprising the steps of:
   (a) selecting a phantom test object within an image;
   (b) quantitative processing of said image to evaluate the scanner; and
   (c) outputting the analysis.

7. The method of claim 6, wherein said step of selecting an image involves selecting a region of said phantom test object.

8. The method of claim 6, wherein said quantitative processing includes evaluating object profile of said phantom test object in axial and lateral directions.

9. The method of claim 6, wherein said quantitative processing includes evaluating calibration.

10. The method of claim 6, wherein said quantitative processing includes evaluating uniformity.

11. The method of claim 6, wherein said quantitative processing includes evaluating vertical pin objects.

12. The method of claim 6, wherein said quantitative processing includes evaluating horizontal pin objects.

13. The method of claim 6, wherein said quantitative processing includes evaluating cyst objects.

14. The method of claim 6, wherein said quantitative processing includes evaluating tumor objects.

15.   The method of claim 6, wherein said quantitative processing includes evaluating distance accuracy in axial and lateral directions.

16.   The method of claim 6, wherein said quantitative processing includes evaluating dead zone and penetration depth.

17.   The method of claim 6, wherein said outputting the analysis includes the compliance of processed results with stored performance standards.

18.   The method of claim 6, wherein said outputting the analysis includes trends of processed results from several sets of tests.

19.   The method of claim 6, wherein said quantitative processing includes evaluating at least one of:

      (a)   said phantom test object diameter in axial and lateral directions;

      (b)   said phantom test object edge in axial and lateral directions;

      (c)   said phantom test object center;

      (d)   said phantom test object area;

      (e)   said phantom test object mean gray value; and

      (f)   fluctuations in said phantom test object mean gray value.

20.   The method of claim 6, wherein said quantitative processing includes evaluating distance between said phantom test objects in axial and lateral directions.

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